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ABSTRACT

Five methods were evaluated for training Kansas agricultural producers for certification as Private Pesticide Applicators. The study involved 471 participants throughout the state. Comparison of pre- and post-test scores showed that teaching by video cassette caused the most improvement, followed by the traditional method using a team of specialists, a self-study programmed instructional packet, a Telenet instructional program, and one-day educational meetings conducted by county extension agents. However, taking into account the cost of each method and the value of alerting large numbers, the Telenet method is recommended. (BB)

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Final Report
EPA Contract
68-01-2963

# ACQUISITION OF INFORMATION TO BE USED IN PROGRAMMING FOR PESTICIDES APPLICATOR CERTIFICATION TRAINING

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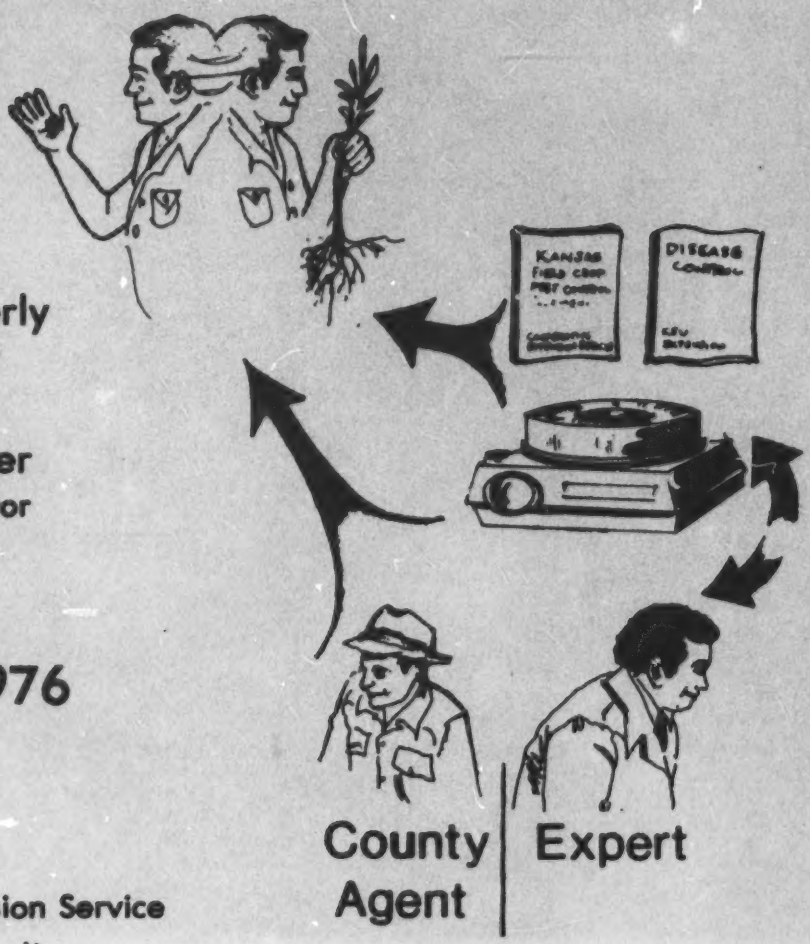


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January, 1976

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ACQUISITION OF INFORMATION TO BE USED IN PROGRAMMING FOR
PESTICIDES APPLICATOR CERTIFICATION TRAINING

I. Introduction

The Environmental Pesticide Control Act of 1972 identifies private applicators in addition to ten classifications of professional and general applicators who will be required to be certified in order to use "restricted use" pesticides.

Many of the pesticides which will be used by private applicators for producing agricultural commodities will come under the category of "restricted use" pesticides. Most of the training programs for certification have concentrated on the professional applicator. With the private applicators to also come under the restrictions of the law, it will be necessary to conduct educational programs at the county or community level designed to help them meet these certification requirements.

II. Statement of the Problem

The evaluation of five methods of training Kansas agricultural producers for certification as Private Pesticide Applicators.

III. Objectives

1 -- To evaluate the relative effectiveness and efficiency of five distinct methods of instruction designed to assist private applicators become certified to use "restricted use" pesticides.

2 -- To provide information to the Environmental Protection Agency (EPA) which will be useful in designing educational materials and instructional strategies that can be used by state

agencies to assist private applicators meet certification requirements for "restricted use" pesticides.

IV. Methodology

Both traditional instructional methods and new innovations in teaching methods are to be used and evaluated. Extension Service is to conduct all training methods since the state legislation has this mandate included in the proposed law. The instructional methods to be used in this study are:

Method A -- One-day Educational Meeting Conducted by Specialist. This traditional method uses a team of specialists. The meetings are open to all individuals who indicated a desire to participate.

Method B -- One-day Educational Meetings Conducted by County Extension Agents. This traditional method will use materials developed by the specialists and open to all individuals who indicate a desire to participate.

Method C -- Self-study Programmed Instructional Packet. The self-study material will be prepared by the Extension specialists with consultant help from specialists in programmed instructional methods. The same information as presented in all other methods will be used. By normal Extension publicity this method will be offered to any individual desiring to participate.

Method D -- Telenet Instructional Program. Using a conference telephone network operated by the Division of Continuing Education of Kansas State University this method will duplicate the specialist training meeting. Each cooperating educational center will be provided materials to be used and the specialist will be able to

answer questions as they occur. Participants desiring to attend this meeting will be limited to the size of the facilities at each center. Repeat presentations would allow all individuals desiring to participate to attend.

Method E -- Teaching by Video Cassette. The video cassette lends itself readily to either individual or group situations. The materials used by the specialist are to be made into slides for television reproduction. The duplication of the specialist method is to be video taped and review questions will substitute for discussion. All individuals desiring to participate will be accepted since the repeat presentation is readily available on video tape cassettes.

V. Assumptions and Justifications

At the time of this study there will not be a state law requiring certification. The number of participants will be affected by the lack of pressure of such a law or even the awareness of it. To counter this problem the cooperating county agent will be instructed to use the term 'pilot study' in his publicity. The problem of the Hawthorne effect is to be equalized by informing all participants that they are participating in a study. Since all methods will have been equally affected, the Hawthorne effect should be nullified.

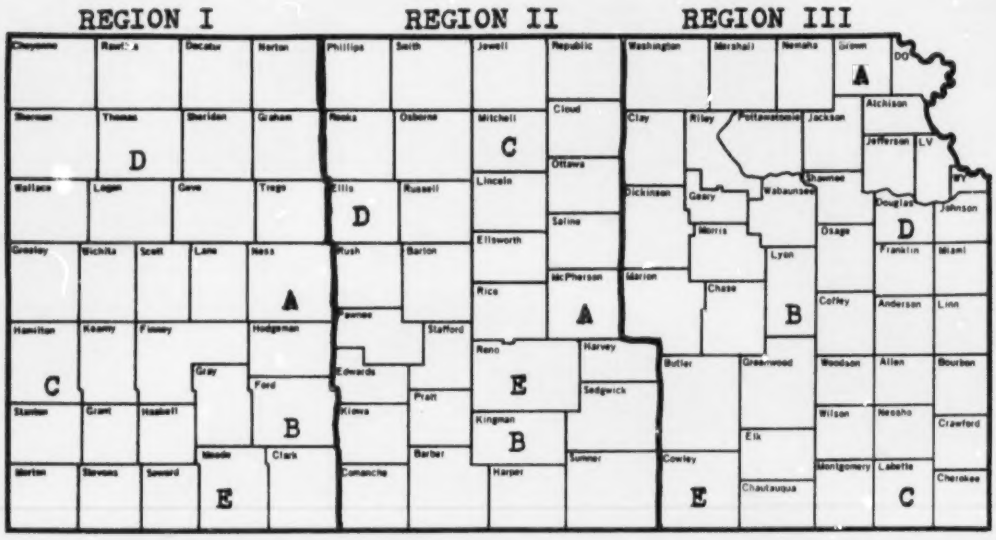
Evaluation by groups and the use of numbered records will reduce the threat to anonymity and privacy. The project coordinator will inform participants of these provisions and the confidentially of all information gleaned.

Nontypical participants will not be included in the evaluation. The professional educator, commercial applicator and special trained persons will be monitored by the project coordinator.

The training materials to be used will be approved by EPA educational pesticide experts and specific objectives to be tested will come from instructional materials produced by these federal personnel.

## VI. Evaluation Procedures

### A. Selection of Participants




Methods:

A. One-day Educational Meeting Conducted by Specialist
B. One-day Educational Meeting Conducted by County Extension Agents
C. Self-study Programmed Instructional Packet
D. Telenet Instructional Program
E. Teaching by Video Cassette

To assure adequate cross section of participants for the study the state will be divided into three regions. Each region will have the five different teaching methods presented at cooperating counties selected by the project coordinator and the Extension Chemical Task Force. Public announcements in each county will open each teaching method to all agricultural producers and no further effort towards random sampling will be needed. The map identifies the counties selected and the method used in each county.

B. Preparation of Training Materials

Both federal and state guidelines were to be used in preparation of instructional materials. The objectives used to prepare the test were approved by both agencies to allow participants to be granted certification. The pretest and post test were identical but printed on cifferent color paper. A multiple choice design with one best answer was used.[1] A total of 44 questions was determined to be satisfactory after several evaluations for length and clarity were conducted.

A demographic questionnaire was designed to collect the participant information needed in this study.[2] The project coordinator monitored these for the nontypical participants and did not include nontypical participants in this study.

An evaluation instrument for each method was used at the conclusion of each meeting.[3] These questions and written comments were useful in determining the strengths and weaknesses of each method.

[1]See Appendix A
[2]See Appendix B
[3]See Appendix C

C. Training and Collection of Data

Method A -- Specialist Team

The specialists included:

Phil Rahn, Weed Scientist; Howard Wang, Entomologist;

Ralph Unger, Agricultural Engineer and Education

After the demographic questionnaire and the pretest, the cooperating county Extension agent introduced the specialist team. Discussion questions were invited after each major topic. A 10-minute coffee break was included with the length of the presentation two hours. The post test and presentation evaluation instrument were given at the conclusion. An additional hour was needed for testing; therefore, total session time was three hours.

Method B -- County Agent

The county agents included:

Don Wiles, Ford County; Norman Schlesener, Kingman County;

Alvin E. Maley, Lyon County

Following the same format and script as in Method A, the county agent served as the specialist, presented the information and responded to questions asked. The length and testing procedures were the same as Method A.

Method C -- Self-study

At the first meeting the participants were pretested and completed the demographic questionnaire. Instructions on the use of the programed instructional manual and the scheduling of the second meeting concluded this first session. Three weeks of self-study time was scheduled. Those not attending the second meeting were contacted and given additional time and then post tested by

the cooperating county agent. At the second meeting the post test and presentation evaluation were administered. Thirty minutes for each meeting was needed and eight to ten hours of self-study was reported by the majority of participants.

Method D -- Telenet

From the Kansas State University telenet control center a tape of the script prepared by the specialist team was presented after initial pretesting and demographic data was collected at each location. Specialists were monitoring each location and as questions were asked they responded. Administration of the post test and presentation evaluation instrument concluded the meeting. The length of the telenet method was the same as Method A and B. (Two hours of presentation plus one hour testing.)

Method E -- Video Cassette

Fifty percent of the slides and script used in the other methods needed alteration or replacement for Video Cassette production. To keep the presentation length of two hours and to have an acceptable visual production, twice as many slides were used. Also review questions were added to supplement for discussion by other methods.

These additional slides and the improved script were prepared and presented by Dr. Donald M. Springer, Television Production Specialist and Ralph Unger, Pesticide "pilot study" Coordinator. Original plans to use the specialist team were changed due to two personnel vacancies.

The cooperating county agents introduced the project coordinator after pretesting and demographic information was collected. The two hour presentation was broken into four tapes. This allowed for brief breaks at tape changing times. Post testing and the presen-

tation evaluation concluded the meeting.

D. Limitations and Difficulties Encountered

The proposed three months for preparation of training materials was increased to seven months. Reproduction of original slides and visuals for video cassette production was a major delay.

Methods A, Specialist Team; Method B, County Agent; and Method D, Telenet; were scheduled during May, 1975 (Kingman County, Method B was held July 28). Conflicts with busy farming activities occurred. Attendance was difficult to predict and several large audiences created poor learning situations. Method B, Lyon County, had double the expected number of participants; all but 50 pre and post tests had been accidently destroyed by the KSU janitorial service; therefore, only the predicted number at Lyon County were both pre and post tested. All others were mailed a post test and asked to return them to their county Extension offices.

Method C, Self-study was delayed until September, 1975, due to lateness of its completion and a further delay due to printing one hundred copies. The wheat seeding and milo harvest conflicted with participation and completion by all. Twenty percent did not take the post test.

Method E, Video Cassette, was not completed until November, 1975. A brief snow storm at Meade County brought twice the number expected. Two television sets were used and at least one more was needed. Reno County had only eleven participants due to a heavy snowstorm. A second meeting on December 15, 1975 conflicted with good farming conditions. Only eight participants attended. A possible factor could have been the news release of a one year extension for certification by congress.

Method D, Telenet, had a unique difficulty. After taping the script, a music background was added to cover some of the voids. Several portions of this tape were reduced to poor quality due to an override of this background music. Also several participants reported some difficulty understanding Howard Wang, entomology specialist. His oriental accent on tape was reported by several on the presentation review instrument to be difficult to fully understand. This problem did not occur at the live presentation in Method A.

E. Analysis of Data

Table 1. Participants by method and region:

| Region | Method | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | Total | % |
| I (west) | 27 | 64 | 14 | 15 | 48 | 168 | 35.7 |
| II (central) | 69 | 61 | 14 | 19 | 16 | 179 | 38.0 |
| III (east) | 16 | 43 | 25 | 16 | 24 | 124 | 26.3 |
| Total | 112 | 168 | 53 | 50 | 88 | 471 | |
| % | 23.8 | 35.7 | 11.3 | 10.6 | 18.7 | | |

These 471 participants ranged in age from 14 to 79 years, with 27 participants over 65 and 16 participants under 20. The mean age was 43.1 years (standard deviation = 14.4). Method B, region III as reported does not include the 44 participants only post tested by mail. Method E, region III, also does not include 33 participants only post tested. The value of review questions on tape would seem to be significant. Results were:

| | Pretest Group Average | Post Test Group Average |
|---|---|---|
| Day meeting | 65% correct | 95% |
| Evening meeting | omitted | 96% |

The education level mean was 12.6 completed years, standard deviation = 2.3. 77 participants reported less than 12 years of completed education. 205 participants reported more than 12 years of completed education.

The statistical analysis for this study considered the value of .05 level or less to be significant. The Pearson Correlation for age and education showed that age affects pretest scores inversely while education affects pretest scores directly. (The older one is, the lower his score; the more education he has, the higher his score.) Using Pearson Correlation results on the post test, education directly affects post test scores; but age no longer is significant. Teaching materials used seems to be satisfactory for all ages.

The test instrument was reviewed and given several critiques by several vocational agriculture young farmer groups before their actual use in this study. Also a Kruder Richardson reliability for each test showed these values:

Pre Test = .83

Post Test = .86

These values are approaching the .9 level of good reliability. Even with these strengths questions 4, 17 and 24 were found to be unreliable on both pre and post tests.

Using the Chi Square analysis for all questions on the test instrument the following questions had the greatest percent "Don't Know" answers.

| Question | Subject | Pre Test | Post Test |
|---|---|---|---|
| 24 | Vapor drift control | 36% | 5% |
| 29 | Certification | 30% | 1% |
| 38 | Formulations needing agitation | 30% | 3% |
| 40 | Nozzel wear versus material | 47% | 2% |

Results of all methods gave the following mean test scores:

Pre Test 31.5 correct with 44 maximum and a 6.3 STD DEV

Post Test 38.8 correct with 44 maximum and a 4.9 STD DEV

The standard deviation improved indicating positive learning by these educational methods and teaching materials used.

Results of each method ranked by mean score differences were:

| | | |
|---|---|---|
| Method E | Video-cassette | 10.53 |
| Method A | Specialist team | 7.73 |
| Method C | Self-study | 7.68 |
| Method D | Telenet | 7.06 |
| Method B | County Agent | 7.04 |

Results of the presentation evaluation instrument were:

Question 1. "Did you find this meeting informative?"

Yes = 3 Somewhat = 2 No = 1

| Method | Average |
|---|---|
| C Self-study | 2.95 |
| B County Agent | 2.90 |
| E Video Cassette | 2.85 |
| A Specialist Team | 2.80 |
| D Telenet | 2.56 |

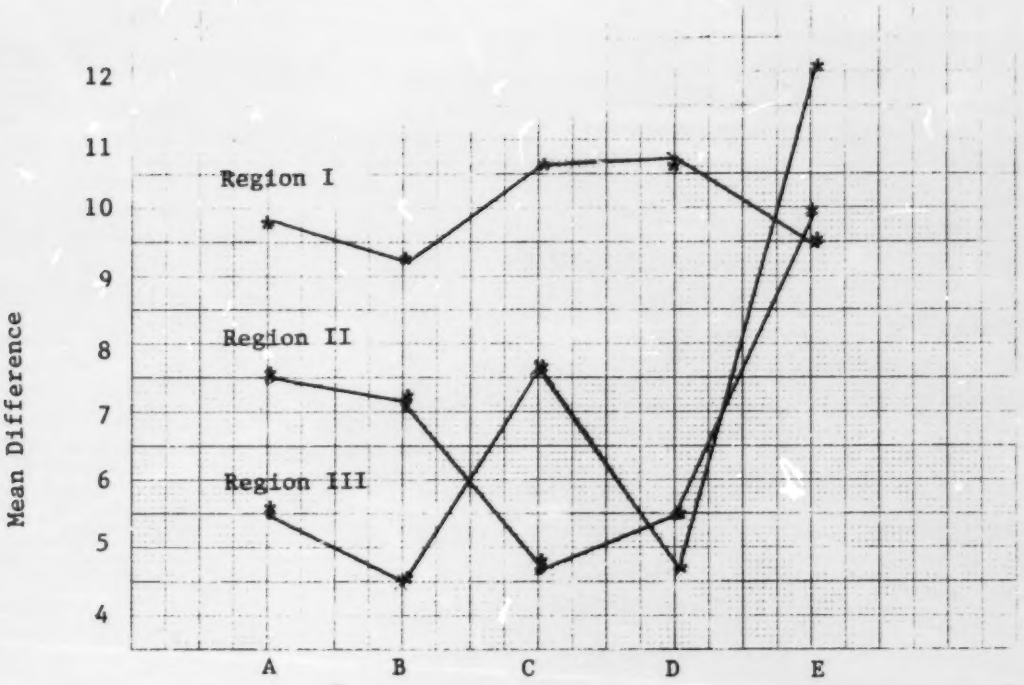
Question 2. "Was this method of presentation satisfactory?"

Yes = 3 Somewhat = 2 No = 1

| Method | Average |
|---|---|
| B County Agent | 2.95 |
| A Specialist | 2.91 |
| C Self-study | 2.90 |
| E Video Cassette | 2.85 |
| D Telenet | 2.25 |

Cross tabulation of data for region and method gave the following:

Kansas Regions by Methods




The above graph shows an interaction by method and region. This study has shown that both region and method must be considered when selecting the better method. The strength of Method E, Video Cassette, could possibly come from the improved visuals as reported in the preparation of training materials. Using the L.S.D. values, Methods A, B, C, and D were not significantly different. Traditional methods A and B are notably uniform in all regions.

F. Cost of Methods

Table 2 in the appendix shows factors of cost for each method. Table 3 below gives actual cost of the study and projected cost using optimum size meetings. In this study optimum size of fifty participants was used.

Table 3.

| Methods | Acutal cost of study per participant | Projected cost per participant if optimum (50) size and for 10 meetings |
|---|---|---|
| A. Specialists | $7.16 | $5.76 |
| B. Telenet | 8.12 | 2.62 |
| C. Self-study | 2.14 | 2.14 |
| D. County Agent | 2.38 | 1.29 |
| E. Video Cassette | 1.99 | 1.27 |

VII. Conclusion

Objective 1 -- To evaluate the relative effectiveness and efficiency of five distinct methods of instruction - - -

This study has shown that both region and method should be considered when selecting the better educational method. Cost and audience preference will be important factors in method selection. The need for certifying many of the 79,000 farmers of Kansas during the next few months also affects the following recommendations.

Primary training based on cost and the value of alerting large numbers could be achieved by Method D, Telenet. The 23 permanent locations could be temporarily increased in the populous areas not now having a hookup. With pre registration, additional hookups could be added at any location where cost would permit this. The limitations of telenet such as poor quality tape recordings and its newness or lack of popularity could be improved by using the improved video-cassette presentation. For repeat presentations, additional pest

management tapes could be produced for each Area Office library that are relative to their localized needs. Scheduling the playback equipment and possibly purchasing needed units should be considered.

After the initial training of large numbers, each county will need to select a method or methods to reach the laggers. Method B, County Agent or Method C, Self-study or a repeat of Method E, Video-cassette should be evaluated by region and county preference. For larger audiences the Specialist Team, Method A, could be evaluated for cost and preference. Additional work on enlarging many of the visuals for these larger audiences will need to be completed.

Objective 2 -- To provide information to the Environmental Protection Agency which will be useful in designing educational materials and instructional strategies that can be used by state agencies - - -

Each state will need to consider its regions of agricultural producers. Knowledge gained from this study would indicate that other states may have to consider both region with method, plus cost and audience preference.

Having used educational materials prepared with federal guidance the statistical analysis of this study found them to be positive learning devices. The fact that age after training was no longer statistically significant gives these educational materials merit.

# PILOT STUDY QUESTIONNAIRE

Instructions: Circle one correct answer.

Do not guess - use item D; don't know.

1. To properly identify a pest, you should:

   A. read the label for identifying characteristics
   B. locate both the pest and its damage symptom
   C. set out poison baits and examine the kill
   D. don't know

2. The major problem in identifying plant diseases is that:

   A. all diseases have similar symptoms
   B. all diseases turn plants yellow which makes them hard to identify
   C. the damage symptoms can resemble drouth or nutrient deficiency
   D. don't know

3. Which of these plant diseases can be transferred from plant to plant:

   A. drought
   B. nutrient deficiency
   C. bacteria
   D. don't know

4. Which one of the following pests bore into the stalk or stem:

   A. pest insects
   B. mites
   C. ticks
   D. don't know

5. Which of the following types of weeds are plants that result from seeds which sprout in the spring and produce seed in one year or less:

   A. winter annuals
   B. summer annuals
   C. biennials
   D. don't know

6. Pesticides move off target by:

   A. run off from sprayed fields
   B. drift by the wind while spraying
   C. both of the above
   D. don't know

7. When you feel uncomfortable during or after handling a pesticide, the first thing you should do is:

   A. lay down and rest for awhile
   B. contact your physician or emergency room
   C. drink a lot of water
   D. don't know

8. Which one of the following is best for pest control management:

   A. always apply a pesticide at first signs of pest activity
   B. use pest controls when pest activity causes unacceptable damage
   C. only pesticides should be considered for control of unwanted pests
   D. don't know

9. While handling pesticides a mild poison symptom may:

   A. be stomach nausea and/or headache
   B. begin as any simple uncomfortable feeling
   C. either of the above
   D. don't know

10. A way in which you will NOT be poisoned by a toxic pesticide is through:

   A. skin contact
   B. inhalation
   C. radiation
   D. don't know

11. When accidental poisoning by a pesticide occurs:

   A. get the label and go to a hospital
   B. get plenty of rest and avoid exercise
   C. drink lots of liquids for several days
   D. don't know

12. Which of the following information will be on the label:

   A. proper handling instructions
   B. proper storage and disposal instructions
   C. both of the above
   D. don't know

13. Signal words on a pesticide label will tell you about:

   A. the target pest
   B. the expiration date
   C. the toxicity of the pesticide
   D. don't know

14. Which one of the following will NOT be found on the label:

   A. target pest
   B. the life cycle of the pest
   C. proper time of application
   D. don't know

15. A control method other than pesticide usage might be:

A. planting crop varieties that resist pests
B. clean plowing and cultivation
C. both of the above
D. don't know

16. First aid procedures when you inhale a pesticide would be:

A. induce vomiting as label instructs
B. get to fresh air
C. wash skin with soap and water
D. don't know

17. Which of the following are pesticides:

A. insecticides, herbicides, fungicides
B. repellent, nematicide, defoliant
C. both of the above
D. don't know

18. The safest way to transport pesticides is to:

A. fasten the containers down in the back of a truck
B. carry them in the driver's compartment so they may be easily watched
C. carry them in the trunk of a car so they won't spill
D. don't know

19. Control of proper droplet size of spray is important because of:

A. possible particle drift
B. excessive nozzle wear
C. erosion of soil
D. don't know

20. Unlawful residues on Agricultural commodities may occur when:

A. the weather is too dry
B. the pest has not consumed all the pesticide
C. pesticides are applied near harvest time
D. don't know

21. The storage room should be kept:

A. secured with a lock
B. air tight at all times
C. open for spot checks by county officials
D. don't know

22. Never store pesticides in beverage bottles because:

A. it makes it difficult to resell
B. it makes it difficult to dilute
C. a child may drink it
D. don't know

23. After an area has been treated with a toxic pesticide you may reenter the area after:

A. you allow a few minutes for the spray to settle
B. checking the label first for instructions on reentry
C. checking to see if someone else has reentered
D. don't know

24. Proper control of vapor drift may be done by:

A. using proper formulation
B. applying on a cloudy day
C. having continuous agitation
D. don't know

25. The preferred method to determine the application rate is:

A. calculate from last years usage
B. calculate after spraying your crop
C. use a test material on a known area
D. don't know

26. The label will alert you to:

A. needed environmental precautions
B. where to get first aid supplies
C. both of the above
D. don't know

27. After each use the equipment should be washed and rinsed and the rinse water should be:

A. sprayed along the roadside
B. disposed of as you would an excess pesticide
C. disposed in an area that is well drained
D. don't know

28. Before disposal of noncombustible containers you should:

A. remove the label before you discard
B. rinse three times and drain completely
C. consider storing for future use
D. don't know

29. Before you purchase a "restricted use" pesticide you will have to:

A. be certified as a private applicator
B. be over 21 years of age
C. both of the above
D. don't know

30. One of the reasons you should recalibrate your equipment frequently is:

A. rapid nozzle wear
B. weather changes
C. drifting problem
D. don't know

31. The factor(s) required to give even spray are:

A. constant speed and pressure
B. type of pump
C. both of the above
D. don't know

32. Before you decide to use a pesticide you should:

A. alert the highway patrol of your decision
B. consider other methods of pest control
C. both of the above
D. don't know

33. Pesticide spills should be:

A. covered up so that no animal can eat it
B. spead out for the sun to evaporate
C. cleaned up and disposed of as you would excess pesticides
D. don't know

34. You should check the label for the type of protective device needed:

A. when an accident occurs
B. before you open the container
C. as you mix the pesticide
D. don't know

35. Before using a pesticide you should:

A. recognize local environmental conditions
B. select the protective equipment needed
C. both of the above
D. don't know

36. The usage of 4 gallons of spray on a known area equal to 1/8 acre gives a rate of:

A. 32 gallons per acre
B. 4 gallons per acre
C. 8 gallons per acre
D. don't know

37. It is wise to consider purchasing only the needed amount of pesticide because:

A. you can usually get it cheaper at a later date
B. you could eliminate storage and disposal problems
C. the state pesticide law requires this
D. don't know

38. Which of the following formulations will need continuous agitation:

A. EC - emulsifiable concentrate
B. SP - soluble powders
C. WP - wettable powders
D. don't know

39. After using protective clothing and devices they should be:

A. cleaned, checked for wear, and stored
B. always discarded and new ones purchased
C. immediately stored
D. don't know

40. Which nozzle type is most susceptible to wear by wettable powders:

A. plastic
B. ceramic
C. brass
D. don't know

41. Advantages of granular applicators are:

A. elimination of mixing
B. elimination of drift
C. both of the above
D. don't know

42. Which term describes the application of a herbicide after the weeds come up:

A. preemergence
B. postemergence
C. postplant
D. don't know

43. Which term instructs that the application of a pesticide should be followed by tillage or mixing with the soil:

A. sidedress
B. foliar
C. soil incorporation
D. don't know

44. With a known application rate of 4 gallons per acre and label instructions tell you to use 1 gallon per acre flowable formulation; how many gallons of this pesticide are needed to prepare a 100 gallon sprayer tank for proper mix:

A. 50 gallons flowable pesticide
B. 25 gallons flowable pesticide
C. 100 gallons flowable pesticide
D. don't know

# PESTICIDE PARTICIPANTS

I. D. _____ Acreage _____

Region _____ Major Farm Activities _____

Study Method _____ _____

Age _____

Education Grade, High School, College, Other

5 6 7 8 9 10 11 12 1 2 3 4

Previous Pesticide Experience: Number of years

1. Own Farm Activities _____
2. On Other Farms _____
3. For Additional Earnings _____
4. Other _____

Appendix C

PRESENTATION EVALUATION

Circle One

1. Did you find this meeting informative? Yes, Somewhat, No

2. This method of presentation was satisfactory. Yes, Somewhat, No

   What other method would you prefer? _____

3. Evaluate these subject areas just presented.

| | | | |
|---|---|---|---|
| Safety Precautions | Good | Fair | Poor |
| Poison Symptoms | Good | Fair | Poor |
| Label and Labeling | Good | Fair | Poor |
| Application Equipment | Good | Fair | Poor |
| Pests and their Damage | Good | Fair | Poor |
| Controls and other Methods | Good | Fair | Poor |

4. What subject matter was left out?

5. What subject matter was not needed?

Table 2. Actual Cost for Five Training Methods

| | Methods | | | | | Optimum Size Meetings | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | A | B | C | D | E |
| Numbers of persons | 123 | 203 | 69 | 58 | 139 | 500 | 500 | 500 | 500 | 500 |
| Extension mandays * | 12 | 6 | -- | 3 | -- | 40 | 6 | -- | 6½ | -- |
| Clerk mandays + | -- | -- | 2 | 1½ | 3 | -- | -- | 15 | 2½ | 10 |
| Salary and wages $ | 600 | 300 | 52 | 159 | 72 | 2000 | 300 | 370 | 385 | 240 |
| Travel Expense $ | 169 | 27 | -- | -- | 42 | 560 | 27 | -- | -- | 42 |
| Materials - Handouts $ | 67 | 112 | 27 | 32 | 82 | 275 | 275 | 200 | 275 | 275 |
| Slide set or Video Tape $ | 45 | 45 | -- | 135 | 80 | 45 | 45 | -- | 450 | 80 |
| Telenet cost $ | | | | 145 | | | | | 200 | |
| Manual | | | 69 | | | | | 500 | | |
| Total Cost $ | 881 | 484 | 148 | 471 | 276 | 2880 | 647 | 1070 | 1310 | 637 |
| Cost/person | $7.16 | $2.38 | $2.14 | $8.12 | $1.99 | | | | | |
| For three meetings if optimum of 50 persons per meeting; cost/person | $5.87 | $3.23 | $2.14 | $3.14 | $1.84 | $5.76 | $1.29 | $2.14 | $2.62 | $1.27 |
| | - - - For 3 meetings - - - - | | | | | - - - - For 10 meetings - - - | | | | |

Methods A - Specialist Team
B - County Agent
C - Self Study
D - Telenet (with 500 use 10 locations)
D - Vidio cassette (equipment available at Area Extension Offices)

* Salary - $50/day
+ Wages - $24/day

Appendix
Table 2